

APD OK
McDonnell Douglas
IBM SIG
Newsletter

01 02 03 04 05 06 07 08 09 10
P X

RCC
161.

if undeliverable,
return to:

K. Casey
N902/B280/1/E2

FLACHSBART, Barry
225/301/2E/279

NEXT MEETING

Tuesday, SEPT 15, 1987

5:30 P.M.

Bldg 270E, Lev 5, Rm 579

(AV8 Control Room)

NEXT MEETING - GAMES: Terry Mueller and Ted Nolde will make up a disk of their favorite games. This should be available for the disk swap. Bring your won favorite games for discussion, demonstration or swapping. Bring a blank formatted disk for the swap.

LAST MEETING - The Heath-Zenith store on McKelvey road gave a presentation on Xerox's Ventura Desk-Top Publishing system. Note that MDC does have an Employee Purchase Agreement with the store. Discounts up to 45% are available on some items. The Ventura Package is available at a 26% discounts to club members. (PC Magazine, Feb 10,87 issue, reviewed the Ventura system.

The Ventura system can run on a PC with a hard disk. It currently uses the GEM interface and will soon have a version using Microsoft Windows to handle the Graphics. They recommend an EGA monitor but it can be used with a CGA monitor.

It is designed for publishing technical manuals. It allows you to combine text and graphics on a single page and to vary the fonts of the text within the page. They have a list of Word Processing Packages and of Graphics packages from which it will accept input.

FirstCADD ST
Generic Software Inc.
Redmond, Washington

Reviewed By: Ron Robinson

Generic Software has offered a very successful and widely acclaimed line of IBM PC CADD software over the past several years. This software consists of FirstCADD PC, a low cost entry level product, and Generic CADD, a full blown expandable CADD package. Generic has recently ported the entry-level CADD package to the Atari ST.

CADD stands for Computer Aided Drafting and Design. A CADD program is easily confused with drawing or paint programs like Degas or Neochrome. CADD programs allow you to input a drawing in actual dimensions, within an accuracy you specify. Objects exist on the drawing in terms of their dimensional definitions. The accuracy of an object is not limited by the resolution of your screen, or the size of the object. For example, if you draw a circle, it is defined by the location of the circles center and its radius. The CADD program can draw the circle on any device and take full advantage of the full resolution of the device.

Drawing programs work with those tiny dots of light you see on your screen known as pixels. The pixels are essentially the units of your drawing. Anything you draw is defined in pixels. CADD programs work with objects or entities rather than pixels. Objects may include: points, lines, circles, arcs, rectangles, polygons, ellipses, curves, etc.. These objects are defined in real world units such as meters or inches.

The distinction between drawing programs and CADD programs becomes most obvious when you draw something and enlarge it. If you enlarge the view of a circle in a drawing program, the pixels that describe circle get bigger, making the line that describes the circumference look wider. In a CAD program, the circle itself will get bigger but the pixels describing the circle circumference remain the same size no matter how much you enlarge the circle.

CADD programs allow you to keep different types of information separate in the same drawing using layers. This is much like over-laying sheets of transparent paper, and provides a means to draw one object on top of another but yet maintain the integrity of each object. This allows you to easily make changes affecting objects in a particular layer without touching the rest of the drawing.

FirstCADD ST is advertised to be an entry-level, full-featured, two-dimensional drafting and design package for the Atari ST. It works with monochrome and color monitors. Printer drivers in several graphics densities are provided for a large number of dot matrix and laser printers.

FirstCADD is not a GEM application. You do not have access to the desk-top or GEM drop-down menus. A menu is provided identical to the IBM PC version. You can customize the menu file using an ASCII text editor to modify the menu to suit your particular application. You can shut off the menu to gain drawing space on the screen.

The program asks you for a file name (be sure to specify full path names here) and checks to see if the file exists. If the file is found, it is loaded and displayed on the screen. If it isn't found, the program asks you if this is a new file, and you are ready to start drawing.

Commands may be selected from the menu on the right side of the screen, or entered from the keyboard as two key commands. The configuration program allows you to program the function keys to frequently used commands. The left mouse button activates the pen, and the right button is used to select menu items. The upper left corner of the screen displays the absolute coordinates of the cursor or the cursor coordinates relative to the last point placed on the drawing. A status and prompt area across the bottom of the screen advises you of the program status. The cursor position on the screen is marked by a set of cross-hairs and controlled by the mouse.

The first thing you want to do is set up the drawing controls. The controls allow you to work in either English or metric units. The colors of all items, including lines, text and menus may be changed. Drawing size, tolerance, grid size, and visible layers may also be set. Many of these options can be automatically set by using the configuration program.

Drawings are formed using the simple objects provided on the drawing menu. Objects include: points, lines, rectangles, two and three point circles, polygons, three and four point arcs, ellipses, and complex (B-spline) curves. Points can be "snapped" to grid intersections or to the nearest point. Rubber banding causes a line to stretch across the screen once you place a point until you place the second point.

Objects can be edited once placed on the drawing by individual object, or from within windows. Objects can be moved, copied, erased or broken once placed on the drawing. When moving objects you are asked if you want straight line stretch. This allows you to make portions of objects larger or smaller and maintain interconnecting lines. Colors, line type and layers of objects can also be changed. Utilities are provided to measure the length, angle or area of objects on the drawing.

Display of the drawing is controlled by the zoom commands. You can zoom to where the drawing fills the screen, zoom to drawing limits, or zoom to a value where you manually set the screen ratio. Zoom up moves the viewing window closer to the drawing and zoom back is like getting further away from the drawing. The drawing can be "panned", which moves the viewing window over the drawing. Functions to redraw the screen, or reset the screen to the previous values are provided. A zoom window command lets you pick an area of the drawing to be displayed, and enlarges it to fill the screen.

FirstCADD has a great deal of text flexibility. You can create your own fonts. Text size, color and rotation can be specified. Text fonts may also be defined to be non-text symbols if desired.

One of the more powerful features of the program is the component function. Components are reusable symbols that can be placed on a menu, picked and placed on the drawing, and saved or recalled from a disk file. They consist of a group of lines that represent a single object. Components may be scaled, rotated or stretched prior to placement. Components are created by placing a window around an object, giving it a name and a reference point. Components are great for anything else that uses standardized symbols, such as architectural symbols or electronic components.

The plot command sends the current drawing to the printer. The program will figure how much to enlarge or shrink the drawing to fit on the sheet of paper, or you can select a print scale. The drawing can be rotated 90 degrees if desired. You can preview the drawing on the screen before printing. The configuration program allows you to select the resolution of your printout. The print resolution selection must be performed before starting FirstCADD. Be prepared for a long wait when printing a drawing.

Drawings can be saved to disk as a compacted drawing file or as a text file where all objects are shown, along with the coordinates of their points. A file conversion utility is provided to allow exchanging files between the Atari ST and the IBM PC version of FirstCADD and Generic CADD. There is no provision for printing a drawing directly to a disk file. A utility to convert drawings to Degas format for use in programs such as Publishing Partner would be a nice addition.

The documentation provided with FirstCADD is very good. The 80 page paperback book contains a table of contents and index making it very easy to find commands. The command descriptions are generally clear and easy to read. Appendices are provided for a Command Summary, Configuration, Fonts, and ST to PC File Conversion. A few references to the Page Up and Page Down keys, which exist on the IBM PC but not the Atari ST, remind you of the parentage of the documentation. The programs performance is roughly the same as an IBM PC with the 8087 math co-processor. The cursor control on the ST is faster than the PC but screen updates seem a little slower.

Generic provides a user support phone line (usually busy but you can get through) and publishes a newsletter for registered users. Version 1.01 had a number of bugs that have been mostly resolved in version 1.02. There is a primitive attempt to provide access to GEM using a file locate command and GEM file selector boxes. This program could be significantly enhanced from the ST users point of view using the full GEM interface. On the other hand, it is very easy to move between the IBM PC and the ST since the user interfaces are very much alike.

FirstCADD ST is a great value for the \$50 retail price. I would highly recommend it to any one needing a simple CADD program that can keep track of dimensional units. FirstCADD ST is most of all a great educational program for anyone who just wants to learn about CADD. A monochrome monitor, 1 meg of memory and at least 750k of disk space are recommended by the author for non-casual use of this program. Hopefully Generic Software will find a large enough market to justify developing the full GenericCADD version for the ST.

FOR SALE: IBM PC JR, IBM 5153 (PCXT) Color Monitor. 128K 1-360K
Disk Drive. Enhanced keyboard with cable. IBM PC-DOS 2.10. IBM
Basic. All manuals and some software. Excellent condition.
\$625.00 Al Brandon 215/270E/L4/ MS95

WANTED: People interested in CAD for PC use. AUTOCAD or
PRODESIGN. Would like to swap stories, problems and solutions.
Al Brandon 215/270e/L4/MS95

FIDO10 ACCESS - FIDO10 operates 24 hrs/day, 7 days/week.
6:00 PM to 10:30 PM - reserved exclusively for MDC-RCC members.
2:00 AM to 5:30 AM - system maintenance and mail activities.
MDC St. Louis tel.nbr. 232-6881; Required Commo parameters:
No Parity, 8 Data Bits and 1 Stop Bit.

IBM - SIG OFFICERS

Ferry Mueller	N680/B281/L3	Director
Ted Nolde	210/B270E/L5/80	Program
Rich McDowell	E416/B101/MEZZ/C51	Secretary
Sam Leong	E030/B74A/L1	Treasurer
Don Ray	E453/B101A/LO3/340	Book Librarian
Frank Broach	253/B101/L2/Rm48	Disk Librarian
Kevin Casey	N902/B280/L1/E2	Editor

Send Change of Address notice to John Wetter, L869/B302/1E. Please include
your RCC membership number, Primary Sig, new address and telephone number.

IBM-SIG DISK LIBRARY REQUEST

NAME _____ ADDRESS _____

I WISH A COPY OF THE FOLLOWING DISKETTE(S):

_____ # _____ # _____ # _____ # _____ # _____ # _____ # _____

Enclosed is a check for \$ _____ and _____ formatted diskettes.

(Note: Label the diskettes before sending them if you want them labeled.)

SEND TO: FRANK BROACH 253/B101/L2/Rm48